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Amendments to the Drawings

Please amend the drawings as follows:

The attached sheets of drawings include changes to FIGS. 2-5, 11, 16, and 18. These sheets replace the original sheets including FIGS. 2-5, 10, 11, 16, 17, and 18.

Attachment: Replacement Sheets

Annotated Sheets Showing Changes

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REMARKS

By the present amendment, the specification, drawings, and claims have been amended to overcome formal matters set forth by the Examiner. In addition, new claims 33-49 have been added. The Examiner's thorough examination of the specification, drawings, and claims is much appreciated. Applicants' believe that all of the formal matters have been corrected. However, with respect to the Examiner's objection to page 12, paragraph 53, Applicants' do not understand the Examiner's objections. The sentence appears to be grammatically correct as written.

Thus, it is submitted that the amendments to the drawings and the specification overcome the Examiner's objections.

Claim Objections – 35 U.S.C. § 112

Claims 6-8, 10, 11, 27, 29, and 32 have been rejected under 35 U.S.C. § 112 second paragraph as being indefinite. Applicants believe that the amendments to the claims, which track the Examiner's helpful suggestions, obviate the rejection of the claims under 35 U.S.C. § 112.

Claim Objections – 35 U.S.C. § 103

Claims 1, 2, 4, 13, 14, 22, 23, and 31 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over the admitted state of the prior art as set forth in the preamble Jepson claim (ASPA) in view of the Ripple U.S. Patent No. 2,814,063. This rejection is respectfully traversed. The Ripple '063 patent discloses a self-propelled vacuum cleaner wherein a handle is pivotally mounted to a base and the base contains an actuator which is coupled to the handle for driving a drive wheel in forward and reverse directions, depending on the force applied to the handle.

The combination of the ASPA in view of Ripple '063 is traversed. There is no basis for making the alleged combination. Simply because Ripple discloses a vacuum cleaner with a traction driver does not suggest that the Ripple traction driver can be used on an upright deep cleaning machine. There is no suggestion in ASPA or Ripple '063 which would warrant the combination. Simply picking and choosing elements from references and combining them to meet a claim construction does not satisfy the standards of 35 U.S.C. § 103. There must be some

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suggestion for the combination. Alternatively, it must be within the skill of the art to make the combination. The Examiner has made no showing as to why it would be obvious to one of ordinary skill in the art to provide a traction driver and power drive assembly of Ripple in ASPA. The statement of reducing operator fatigue by providing for a self-propelled cleaning apparatus does not satisfy the standard. It is merely a conclusory statement that is drawn from the combination. But there is no desirability shown for powering an extraction cleaner. Extraction cleaning machines and vacuum cleaning machines are entirely different machines that operate mostly on different principles. It is therefore submitted that claims 1, 2, 4, 13, 14, 22, 23, and 31 are not obvious over the combination of ASPA in view of Ripple '063.

With respect to claims 2, 4, 22, and 23 the alleged combination of Ripple '063 and ASPA does not disclose a drive actuator on the handle operably connected to the drive motor for controlling the selective driving of the traction driver by the drive motor. There is no drive actuator on the Ripple '063 handle. The drive actuator is on the base and responds to movement of the handle.

With respect to claim 14, alleged combination of Ripple '063 and ASPA does not disclose a belt between a transmission assembly and the traction driver. The transmission assembly is directly connected to the traction driver in Ripple '063.

In view of the foregoing, it is submitted the claims 1, 2, 4, 13, 14, 22, 23, and 31 patentably define over any alleged combination of ASPA in view of Ripple '063.

Claims 1, 2, 4-6, 13, 14, 22, 23, and 31 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over ASPA in view of the Meyer et al. U.S. Patent No. 5,335,740. This rejection is respectfully traversed. The Meyer et al. '740 patent discloses a vacuum cleaner similar to the Ripple '063 patent with a somewhat different traction drive system.

The alleged combination of ASPA and Meyer et al. '740 is traversed. There is no basis for making the combination. There is no suggestion in the Meyer et al. '740 of the use of the Meyer et al. '740 traction drive system in an upright extraction machine. In this rejection, as in the previous rejection, the Examiner has merely selected various features from the Meyer et al. '740 patent and represented that it would have been obvious to use these features in an extraction cleaning machine. However, there is no suggestion or motivation for making the combination.

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The statement of reducing operator fatigue is a conclusory statement and has no basis in fact in any of the references. It is therefore submitted that the rejected claims 1, 2, 4-6, 13, 14, 22, 23, and 31 patentably define over the alleged combination of ASPA in view of Meyer et al. '740.

With respect to claim 2, the alleged combination of ASPA and Meyer et al. '740 does not disclose a drive actuator on the handle operably connected to the drive motor for controlling selective driving of the traction driver by the drive motor. The drive actuator in Meyer et al. '740 is not on the handle but rather on the base. It is the movements of the Meyer et al. '740 handle which operates the drive actuator.

Claims 4-6 depend from claim 2 and are patentable for the same reasons that claim 2 is patentable over the alleged combination of ASPA and Meyer et al. '740.

With respect to claim 14, the Meyer et al. '740 patent does not disclose a belt between the transmission assembly and the traction driver. The belt in Meyer et al. '740 provides the primary drive from the motor 17 to a transmission that in turn drives the rear traction wheels. The belt does not extend between the transmission and the rear traction wheels.

With respect to claims 22 and 23, the Meyer et al. '740 patent does not disclose a drive actuator on the handle for selectively controlling the movement of the base over the surface to be cleaned. The Meyer et al. '740 drive actuator is on the base and not on the handle.

In view of the foregoing, is submitted that claims 1, 2, 4-6, 13, 14, 22, 23, and 31 are patentable over ASPA in view of Meyer et al. '740.

Claims 7, 8, 15, 24, 25, and 28 have been rejected under 35 U.S.C. § 103 as being unpatentable over ASPA in view of Meyer et al. '740 as applied to claim 7 above and further in view of the Martin et al. U.S. Patent 4,766,640. This rejection is respectfully traversed.

It is noted that the combination of ASPA in view of Meyer et al. '740 is not applied against claim 7 in the previous rejection but was applied against claim 6 from which claim 7 depends. In addition, ASPA in view of Meyer et al. '740 was applied against claims 13 and 14 from which claim 15 depends. Further, ASPA in view of Meyer et al. '740 was applied against claim 1 from which all of these claims depend. Applicants believe that the Examiner meant "as applied against claim 1" instead of "as applied against claim 7" and the rejection will be so treated.

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The Martin et al. '640 patent relates to a self-propelled upright vacuum cleaner that has a cable connection between an axially moveable handle grip and a drive system that drives the wheels of the vacuum cleaner in a forward and reverse direction. Further, the Martin et al. '640 patent is cited to show a belt tensioner. However, the belt tensioner adjusts the tension in a belt between the vacuum motor and a brush.

The alleged combination of ASPA in view of Meyer et al. '740 and Martin et al. '640 is traversed. There is no basis for making the alleged combination.

The alleged combination of ASPA in view of Meyer et al. '740 has been discussed above and is believed to be equally applicable here. The Martin et al. '640 reference and the Meyer et al. '740 reference both disclose a powered vacuum cleaner, but that is the end of the comparison. The mechanisms for driving the vacuum cleaners as well as the transmissions and the operation of the transmissions of these two references are entirely different. The Examiner has provided no guidance as to how the Meyer et al. '740 reference could be modified by the teaching of the Martin et al. '640 patent. It is quite evident that the Examiner has merely lifted elements of the Martin et al. '640 patent and represented, without support, that these elements can be incorporated into the Meyer et al. '740 reference without discussing how the Meyer et al. '740 reference could be modified with the Martin et al. '640 teachings. The Meyer et al. '740 reference does not disclose a powered brush drive, but one can be presumed. The powered brush drive is likely to be disclosed by other references and is typically driven by the vacuum motor.

Thus, the alleged combination of Martin et al. '640 with Meyer et al. '740 would at best place a belt tensioner on the belt drive for the brush that may exist in the Meyer et al. '740 vacuum cleaner. It is not at all clear how the Martin et al. '640 cable drive could be used in the Meyer et al. '740 transmission.

Claims 7, 8, 15, 24, 25, and 28 distinguish over the alleged combination of ASPA in view of Meyer et al. '740 and Martin et al. '640 in the same fashion that claim 1 distinguishes over the alleged combination of ASPA in view of Meyer et al. '740. There is no suggestion of incorporating the Meyer et al. '740 and Martin et al. '640 drive systems in an extraction cleaning machine and the combination is inappropriate.

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Claims 7 and 8 further distinguish over the alleged combination of ASPA, Meyer et al. '740 and Martin et al. '640 in calling for handle grips slidably mounted on the upper portion of the handle for axial movement along the handle between forward and reverse positions. Although the Martin et al. '640 reference discloses a handle grip slidably mounted on an upper portion of a handle for axial movement for controlling forward and rearward movement of the vacuum cleaner, it is believed that this element in combination with the Meyer et al. '740 reference does not meet the claims because there is no enabling teaching as to how the handle grip actuator of Martin et al. '640 can be incorporated into the Meyer et al. '740 drive actuator.

Claim 15 distinguishes over the alleged combination of ASPA, Meyer et al. '740, and Martin et al. '640 in calling for a belt tensioner to maintain tension on the belt between the transmission assembly and the traction driver. The alleged combination of these references would at best show a tensioner on a brush belt drive in the Meyer et al. '740 vacuum cleaner. It should be further pointed out that claim 15 depends from claim 14 and calls for a belt between a transmission assembly and a traction driver. Neither of the Meyer et al. '740 or the Martin et al. '640 references disclose this combination. Although both of these references use a belt drive, the belt drive is between the motor output and transmission and not between the transmission and the traction driver.

Claims 24 and 25 define over the alleged combination of ASPA in view of Meyer et al. '740 and Martin et al. '640 in the same fashion as claims 7 and 8 in that the alleged combination of references does not disclose a handle grip slidably mounted on the upper portion of the handle for axial movement along the handle between forward and rearward positions which is the subject matter of claims 24 and 25.

Claim 25 further distinguishes over the references in calling for the drive actuator to be biased to a neutral position between forward and rearward positions for disablement of the power drive assembly when the handle is in a reclining position. This concept is not disclosed in either of the references. The Martin et al. drive actuator is biased to a neutral position and has a neutral lock, but only when the handle is in the upright position.

Claim 28 distinguishes over the alleged combination of references because it depends from claim 25 and defines over the references in the same fashion as claim 25 and further calls

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for a lock for selectively locking the handle grip in the neutral position when the handle is in a reclining position. This concept is not disclosed by the references.

Claims 7, 8, 15, 24, 25, and 28 are rejected under 35 U.S.C. § 103(a) as being unpatentable over ASPA in view of the Ripple '063 patent and Martin et al. '640. This rejection is respectfully traversed. The alleged combination of ASPA with Ripple '063 is untenable as discussed above with respect to the rejection of claim 1. Applicants reiterate their arguments made above with respect to the alleged combination of ASPA in view of Ripple '063.

The combination of ASPA, Ripple '063, and Martin et al. '640 is traversed. It is equally as inappropriate as the combination of ASPA, Meyer et al. '740, and Martin et al. '640 as discussed above. Applicants reiterate their arguments with respect to the combinability of ASPA, Meyer et al. '740, and Martin et al. '640 against the arguments of ASPA, Ripple '063, and Martin et al. '640.

With respect to the rejection of claims 7, 8, 15, 24, 25, and 28 over this combination of references, it is believed that Applicants' arguments above with respect to these same claims as to the rejection of ASPA in view of Meyer et al. '740 and Martin et al. '640 are equally applicable here. These arguments are incorporated herein by reference.

Claim 12 has been rejected as being unpatentable over ASPA in view of Ripple '063 and further in view of the Louis et al. U.S. Patent No. 5,983,442. This rejection is respectfully traversed. The alleged combination of ASPA in view of Ripple '063 and Louis et al. '442 is traversed. There is no basis for making this combination. The inappropriateness of the ASPA and Ripple references has been discussed above and is equally applicable here. Further, there is no suggestion as to how to incorporate the teaching of Louis et al. in the alleged combination of ASPA and Ripple '063. Thus, the combination of ASPA, Ripple '063, and Louis et al. '442 is untenable.

The Louis et al. '442 patent discloses an upright deep cleaner wherein an air drive turbine motor is used to drive brushes and a fluid pump. There is no suggestion in Louis et al. of using a turbine motor for driving the base of the upright deep cleaner in the Louis et al. '442 patent. Nor is there any suggestion as how the turbine motor would be used in the Ripple '063 patent or the alleged combination of Ripple '063 with ASPA.

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The Examiner will appreciate that the Ripple '063 reference uses a vacuum motor to drive a transmission. The Louis et al. '442 patent has an electric motor to drive the vacuum source as well as to drive the brush. Incorporating the turbine motor of Louis et al. '442 patent into the Ripple '063 patent would render the Ripple '063 vacuum cleaner inoperative because there would be no suction source to drive the vacuum motor. The alleged combination of Louis et al. '442 and Ripple '063 would merely substitute the Louis et al. '442 turbine motor for the Ripple '063 vacuum motor. Alternatively, at best, the turbine motor would be added to the Ripple '063 reference in order to drive the brush. This alleged combination would not meet claim 12 which calls for a power drive assembly including an air turbine motor.

Claim 12 has also been rejected under 35 U.S.C. § 103(a) as being unpatentable over ASPA in view of Meyer et al. '740 as applied to claim 1 above and further in view of Louis et al. '442. This rejection is respectfully traversed.

As indicated above, the Meyer et al. '740 and the Ripple '063 references appear to be commensurate in disclosure with respect to the claims of the present application. Thus, Applicants arguments with respect to the distinction of claim 12 over the alleged combination of ASPA in view of Ripple '063 and Louis et al. '442 are equally applicable against the alleged combination of ASPA, Meyer et al. '740, and Louis et al. '442 and are incorporated herein by reference.

Claim 30 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over ASPA in view of Ripple '063 as applied to claim 1 or Meyer et al. '740 as applied against claim 1 and further in view of the Barnhart U.S. Patent No. Des. 152,182. These rejections are respectfully traversed.

The combination of ASPA in view of Ripple '063 or Meyer et al. '740 with the Barnhart '182 reference is traversed. There is no basis for making the alleged combination.

The Barnhart '182 patent discloses an upright vacuum cleaner which appears to have a grip for carrying the vacuum cleaner on a pivotal handle. There is no teaching incorporating the Barnhart handle structure into Ripple '063 in view of foregoing, it is submitted that claim 30 patentably distinguishes over either of Ripple '063 or Meyer et al. in view of ASPA and Barnhart '182.

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Claim 32 has been rejected under 35 U.S.C. § 103 as being unpatentable over the Louis et al. '442 patent in view of the Meyer et al. '790 patent and the Martin et al. '640 patent. This rejection is respectfully traversed. The Louis et al. '442, Meyer et al. '740, and Martin et al. '640 patents have been discussed above. Although this precise combination of Louis et al. '442, Meyer et al. '740, and Martin et al. '640 was not made with respect to any of the other claims, this alleged combination is traversed for the same reasons as alleged combination of ASPA with either Meyer et al. '740 or Martin et al. '640.

The Louis et al. '442 patent appears to disclose nothing more than what is disclosed in the preamble to claim 1, otherwise known as ASPA. Thus, the alleged combination of Louis et al. '442 with Meyer et al. '740 or Martin et al. '640 is traversed for the same reasons as set forth above with respect to ASPA, Meyer et al. '740, and Martin et al. '640. The Examiner has merely picked elements from the references which appear to relate in some manner to the elements of the claims and merely alleged that it would be obvious to combine all of these elements into Applicants' claims. However, there is no teaching as to how these elements could be combined to reach Applicants' claimed invention. Simply pointing out that various features are found in prior art references does not meet the standard of 35 U.S.C. § 103 of obviousness. One must show a plausible connection between the two based on the teaching of the references not by conclusory statements as to what advantage would be gained if the combination were made. These conclusory statements are nothing more than a demonstration of classic hindsight argument.

However, even if the alleged combination were to be made, however untenably, it still would not reach Applicants' claimed invention as defined in claim 32. The alleged combination would simply provide the Meyer et al. suction drive system on the Louis et al. extraction machine, modified with the Martin et al. to provide a slidable handle grip with a cable connected to the Meyer et al. clutch actuator and would further provide a belt tensioner between the motor and the brush drive which one might infer from the Meyer et al. '740 reference. Applicants wish to point out that the turbine drive in the Louis et al. '442 patent does not have a belt drive between the turbine motor and the brushes. The drive appears to be a direct drive system.

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Claim 32 distinguishes over the alleged combination in calling for a belt drive connecting the transmission assembly to at least one wheel and having a tension adjuster for maintaining a predetermined tension on the belt when the base is driven in the front and rear directions. Although Meyer et al. '740 discloses a belt between the transmission assembly and the motor, Meyer et al. '740 does not disclose a belt drive between the transmission and the wheels. However, Martin et al. '640 does disclose a belt drive between the transmission and the wheels as well as a belt drive between the motor and the transmission.

In spite of all of these machinations of elements that, which in some undisclosed way, must be combined to meet the claimed invention, there still is no disclosure of a tension adjuster to maintain a predetermined tension on the belt drive between the transmission assembly and the at least one wheel. Thus, claim 32 patentably distinguishes over the alleged combination of Louis et al. '442, Meyer et al. '740, and Martin et al. '640.

It is noted with appreciation that claims 3, 9, 16-21, and 26 have been indicated as allowable if rewritten in independent form and that claims 10, 11, 27, and 29 would be allowable if rewritten to overcome the rejections under 35 U.S.C. § 112 and written in independent form. In view of Applicants' position with respect to claim 1, from which all of these claims depend, these claims have not been rewritten in independent form although claims 10, 11, 27, and 29 are now believed to be free from any objections under 35 U.S.C. § 112.

Applicants have added new claims 37-48 to reflect in independent form some of the novel features which the Examiner has indicated as being allowable without rewriting the dependent claims in independent form. Claim 37, for example, calls for independent vacuum and drive motors in a power driven extractor. New claim 42 calls for a power driven extractor with a direct drive between the motor and the transmission, which is not found in any of the cited references. Newly added claim 43 calls for a power drive extractor with a lock on the handle accessible to the operator for selectively locking the handle in the neutral position. Claim 46 calls for a power driven extractor with a rigid connection between the handle grip and the power drive assembly for controlling the direction of the propulsion of the base assembly in a forward, neutral or rearward position depending of the position of the handle grip in the forward, neutral and rearward positions, respectively. Claim 47 calls for a power driven extractor with a flywheel

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mounted for rotation about a central axis and a drive wheel axially shiftable and non rotatably mounted on a drive axle for rotation therewith, and wherein the drive wheel has an outer circumferential surface that frictionally engages the radial surface of the fly wheel and is driven thereby to transfer rotary motion of the fly wheel to rotary motion of the drive axle. Claim 49 calls for a power driven extractor with a connection between the handle grip and the power drive assembly the includes mounting block, slidable on the handle, and with a solution valve mounted to the sliding block for movement therewith. These concepts are not disclosed in any of the references.

In view of the foregoing remarks and amendments it is submitted that all of the claims in this application are in condition for allowance. Early notification of allowability is respectfully requested. If the Examiner does not believe that all of the claims are in condition for allowance, the courtesy of a telephone interview is respectfully requested.

Respectfully submitted,

Gary A. Kasper et al.

Dated: 2.16.05

By: 

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Reply to Office Act of Nov. 17, 2004
Annotated Sheet Showing Changes

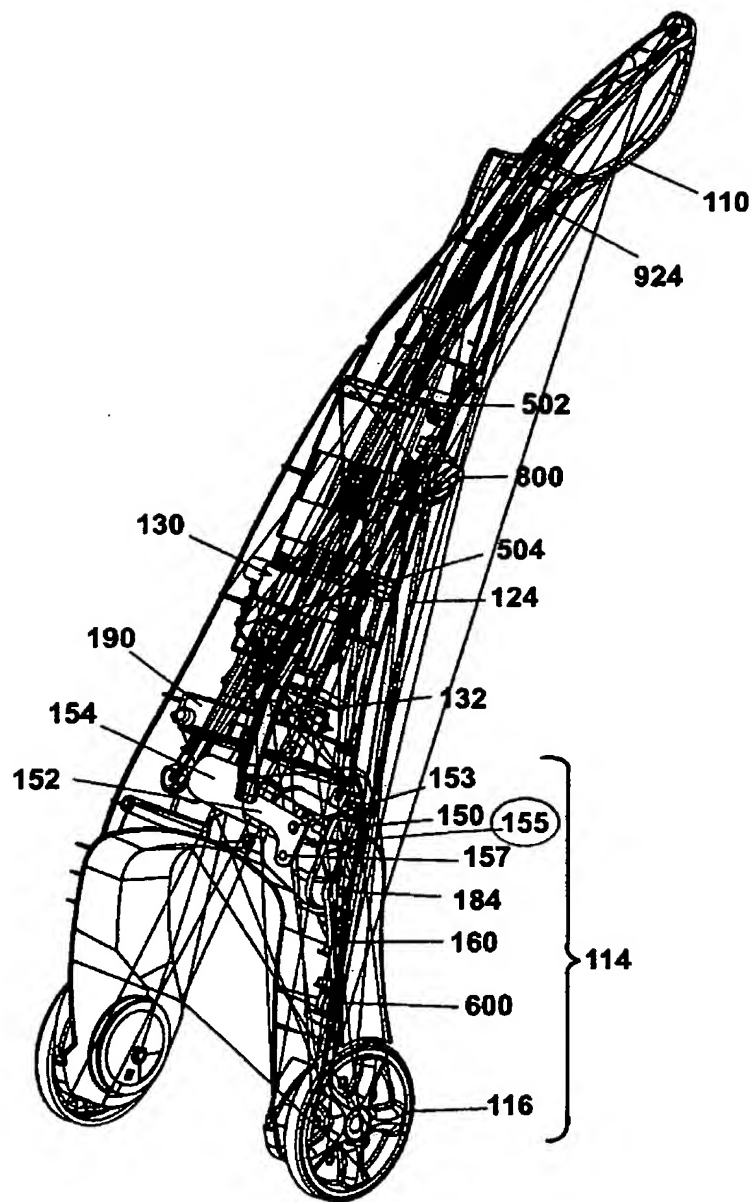


Fig. 3

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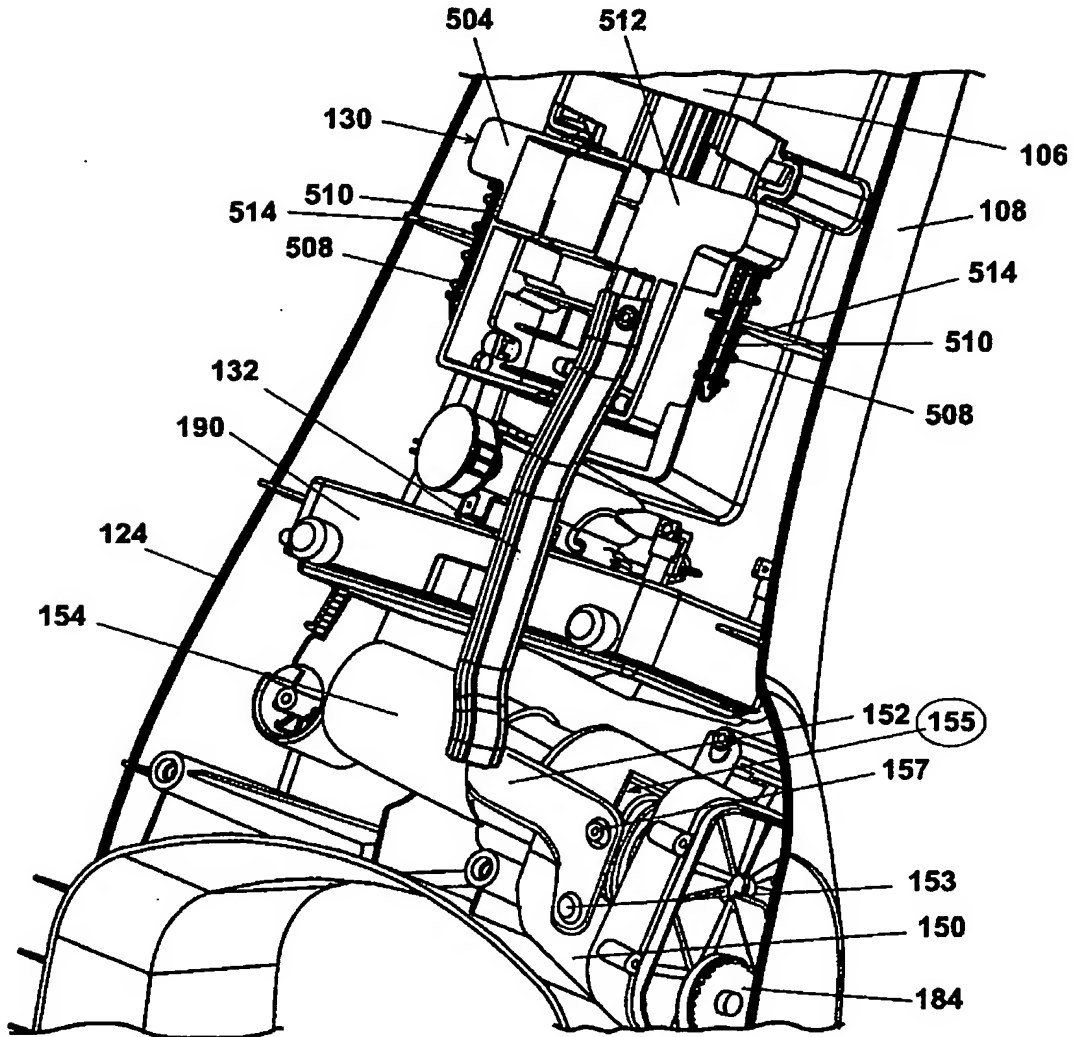


Fig. 4

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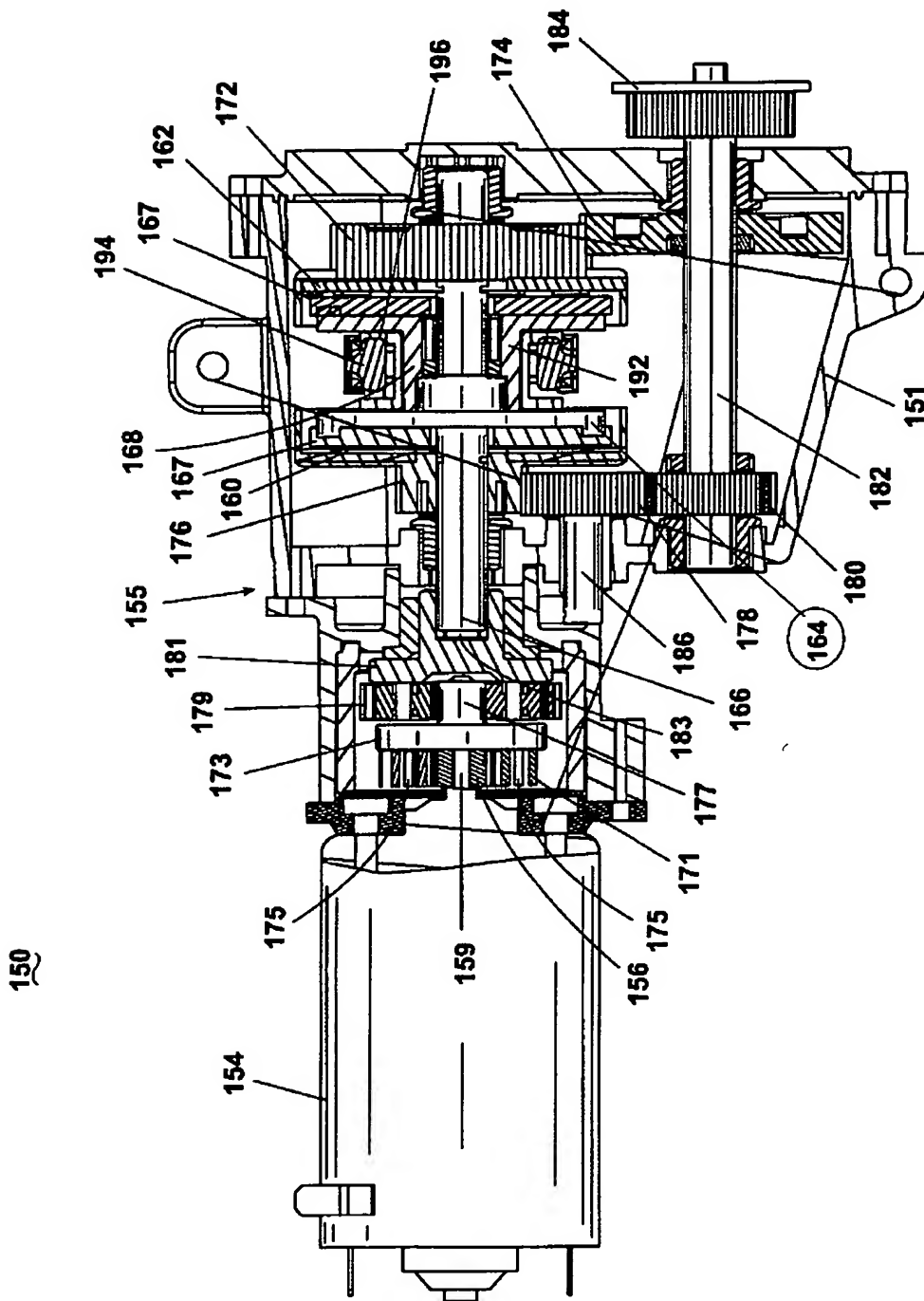


Fig. 5

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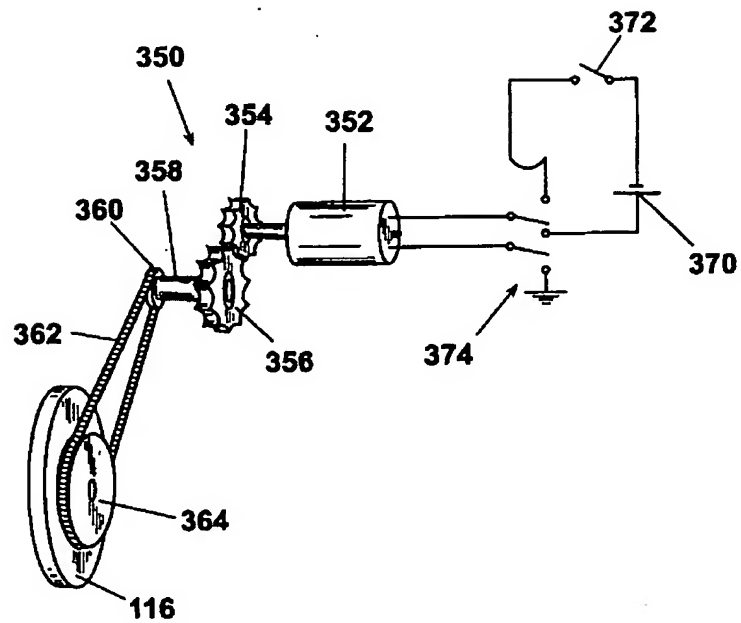


Fig. 10

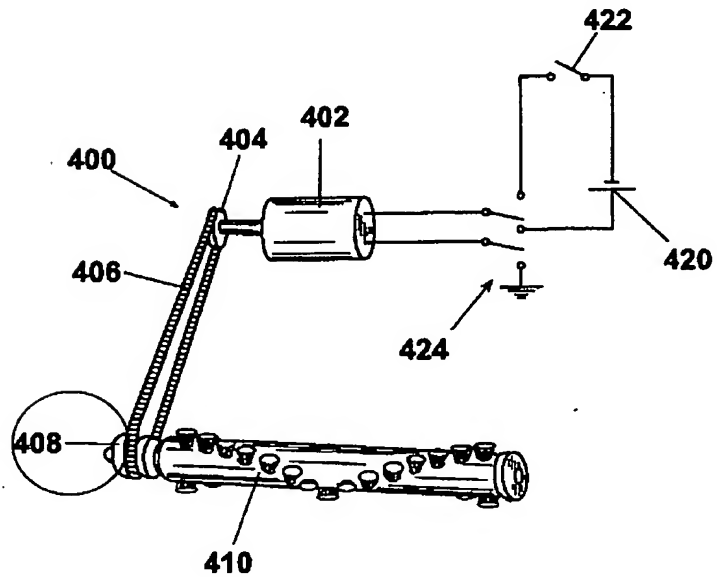


Fig. 11

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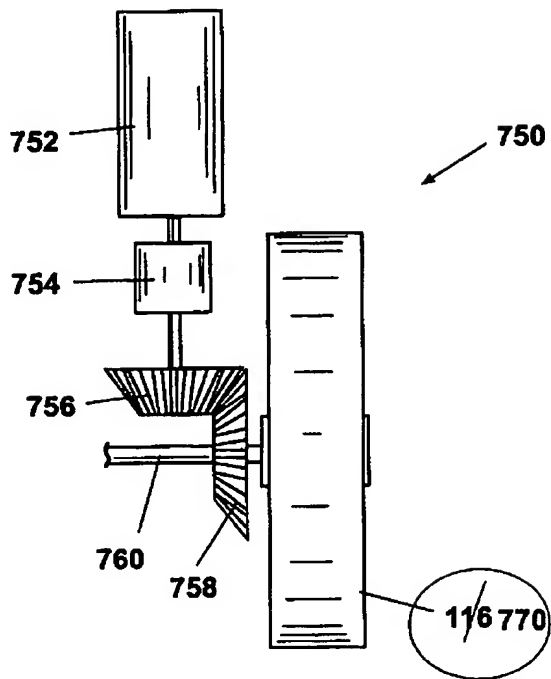


Fig. 16

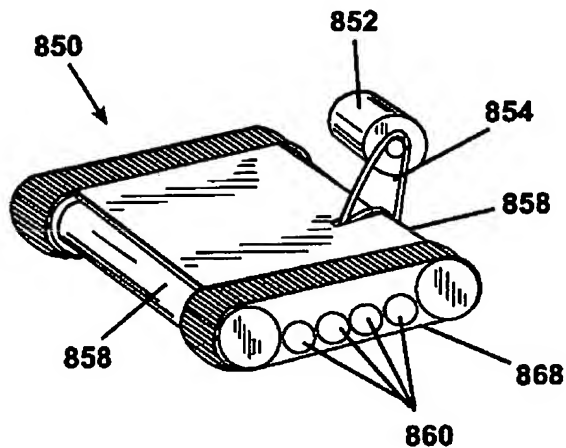


Fig. 17

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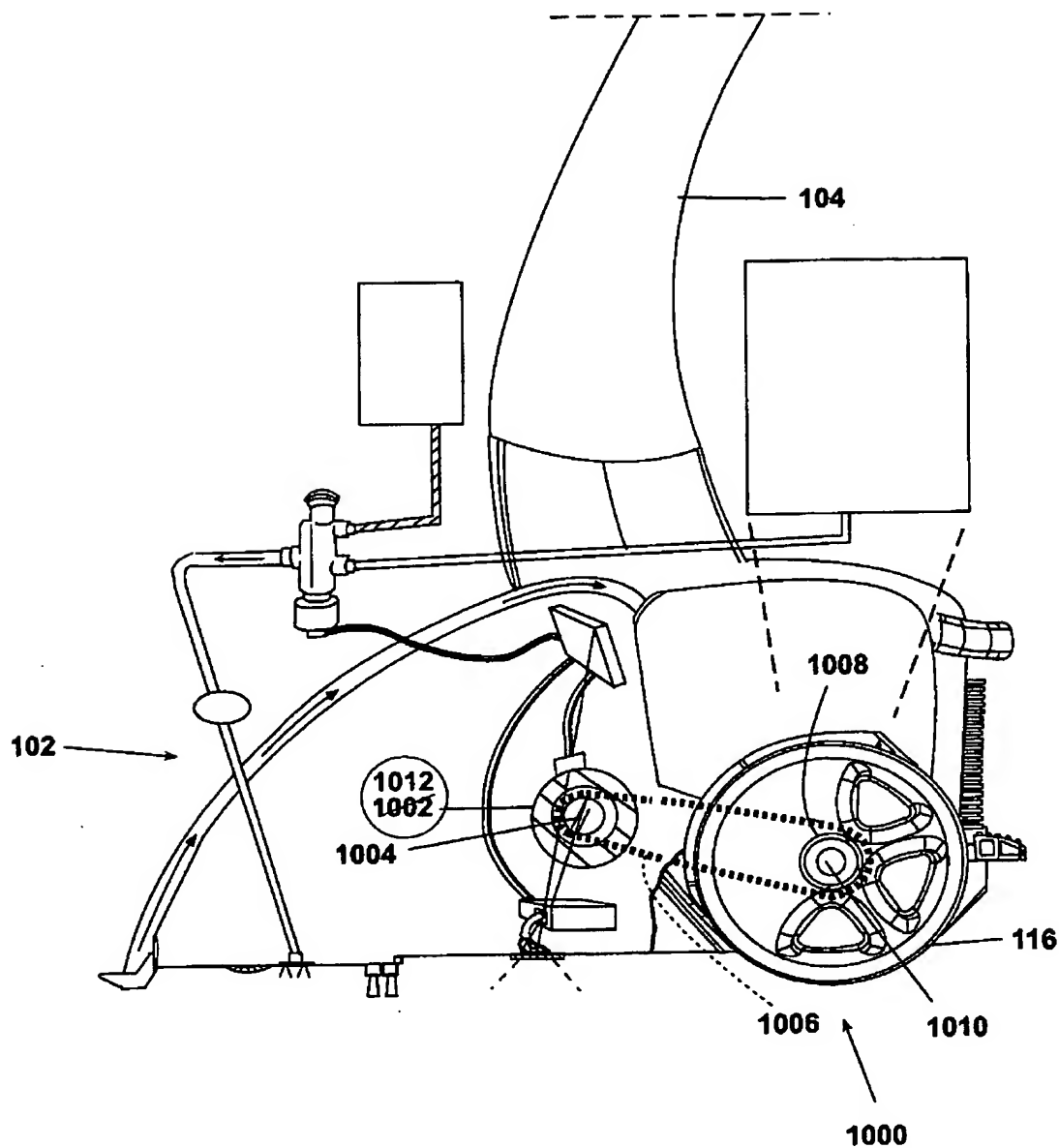


Fig. 18